AIR QUALITY PERMIT

Issued To: Treasure State Construction, Inc. Permit #2893-06

P.O. Box 1341 Administrative Amendment Request Polson, MT 59860 Received: 5/07/04

Department Decision on Administrative

Request: 6/07/04 Permit Final: 06/23/04 AFS #: 777-2893

An air quality permit, with conditions, is granted to Treasure State Construction, Inc. (Treasure) pursuant to Section 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

- A. Plant Location: Treasure operates a portable crushing/screening facility to operate at various locations throughout Montana. Permit #2893-06 applies while operating in any location in the state of Montana, except within those areas that have a Department of Environmental Quality (Department) approved permitting program or those areas that are considered tribal lands. Addendum 5 to this permit applies to operations in or within 10 kilometers of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. A listing of the permitted equipment is contained in Section I.A of the permit analysis. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*.
- B. Current Permit Action: The current permitting action is in response to a request for an administrative amendment of Permit #2893-05 and Addendum 4. The current permit action will generalize the permit and renew the expired addendum. Permit #2893-06 replaces Permit #2893-05 and Addendum 5 replaces Addendum 4.

Section II: Limitations and Conditions

A. Emissions Limitation

- 1. Treasure shall not cause or authorize to be discharged into the atmosphere from any Standards of Performance for New Stationary Sources (NSPS) affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
- 2. Treasure shall not cause or authorize to be discharged into the atmosphere from any other NSPS affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
- 3. Treasure shall not cause or authorize to be discharged into the atmosphere, from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).
- 4. Treasure shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate

- matter (ARM 17.8.308).
- 5. Treasure shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.752).
- 6. Water and/or dust suppressant shall be available and used, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752).
- 7. Total production from the facility shall be limited to 1,708,200 tons during any rolling 12-month time period (ARM 17.8.752).
- 8. The generator shall not be used more than 4,430 hours during any rolling 12-month time period (ARM 17.8.752 and ARM 17.8.1204).
- 9. If the permitted equipment is used in conjunction with any other equipment owned or operated by Treasure, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

B. Emissions Testing Requirements

- 1. All Compliance Source tests shall be conducted in accordance with the Montana Source Testing Protocol and Compliance Source Procedures Manual (ARM 17.8. 106).
- 2. The Department may require further testing (ARM 17.8.105).

C. Reporting Requirements

- 1. If the crusher plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location form must be submitted to the Department prior to the move. These forms are available from the Department upon request (ARM 17.8.765).
- 2. Treasure shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by Treasure as a permanent business record for at least 5 years following the date of the measurement must be submitted to the Department upon request, and must be available at the plant site for inspection by the Department (ARM 17.8.749).
- 3. Treasure shall supply the Department with annual production information for all emission points, as required by the Department, in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of this permit.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in units as required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

- 4. Treasure shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emissions unit. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745 (1)(d) (ARM 17.8.745).
- 5. Treasure shall document, by month, the aggregate production from the facility. By the 25th day of each month, Treasure shall total the aggregate production during the previous 12 months to verify compliance with the limitation in Section II.A.7. A written report of the compliance verification shall be submitted annually to the Department and may be submitted along with the annual emission inventory (ARM 17.8.749).
- 6. Treasure shall document, by month, the hours of operation of the generator. By the 25th day of each month, Treasure shall total the hours of operation during the previous 12 months to verify compliance with the limitation in Section II.A.8. A written report of the compliance verification shall be submitted annually to the Department and may be submitted along with the annual emission inventory (ARM 17.8.749).
- 7. Treasure shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204 (3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted with the annual emission inventory information (ARM 17.8.749 and ARM 17.8.1204).

D. Addendum

Treasure shall comply with all conditions in Addendum 6 to this permit as appropriate.

Section III: General Conditions

- A. Inspection Treasure shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Treasure fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Treasure of the responsibility for complying with any applicable federal or

- Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement, as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing postpones the effective date of the Department's decision until the conclusion of the hearing and issuance of a final decision by the Board. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Treasure may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Treasure shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas having a Department approved permitting program.

Permit Analysis Treasure State Construction, Inc. Permit #2893-06

I. Introduction

A. Permitted Equipment:

Treasure State Construction, Inc. (Treasure) operates a portable 1993 EL-Jay 1313 cone crusher (up to 320 tons per hour (TPH)), a portable 1999 Barmac Impact crusher (up to 500 TPH), a portable 1974 Cedarapids feeder, two portable 1990 conveyors (36"x50"), two screens (up to 320 TPH each), one diesel generator (up to 1447 Horsepower (HP)), and associated equipment.

B. Source Description

Treasure proposes to use this crushing/screening plant to crush, screen, and sort sand and gravel materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant via a hopper and transferred by conveyor to the crushers. From the crusher, materials are sent to the screens, where they are separated and conveyed to stockpiles.

C. Permit History

On September 9, 1995, Permit **#2893-00** was issued to Treasure to operate a portable 1993 EL-Jay cone crusher, a 1974 Cedarapids feeder, two 1990 conveyors (36" x 50'), two screens, and a Caterpillar 3512 Genset generator.

On May 1, 1996, Permit #2892-01 was issued to Treasure to operate a portable 1993 EL-Jay 1313 cone crusher, a 1974 Cedarapids feeder, two 1990 conveyors (36" x 50'), two screens, and a Caterpillar 3512 Genset generator at the N $\frac{1}{4}$, SW $\frac{1}{4}$, Section 34, Township 29 North, Range 20 West, in Flathead County, Montana during the summer and winter months (January 1 through December 31). Because this location was approximately within 10 kilometer (km) of the Kalispell particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment area (NAA), an addendum was necessary for operation. Therefore, **Addendum 1** was established.

On November 9, 1997, Permit #2893-02 and Addendum 2 was issued to Treasure to operate in or within 10 km of a PM_{10} NAA during the summer months (April 1 through September 30) and in the SE ¼ of the NE ¼ of Section 2, Township 29 North, Range 21 West, in Linclon County, Montana during the winter months (October 1 through March 31). An hourly operational limit was added to the permit to allow the facility to stay below the Prevention of Significant Deterioration (PSD) threshold levels. A review was conducted during the original permit issuance, but the emission factors changed after the original permit issuance. These rule references were also updated.

On February 20, 1999, Treasure was issued a modification to Permit #2893-02 to allow operation at a location that is within 10 kilometers of the Libby PM_{10} NAA during the winter and summer months and any other location that is in or within 10 km of certain PM_{10} NAA during the summer months. In addition, the rule references and emission factors were updated and the permitting language was changed to reflect the current format used for writing permits. Finally, Treasure accepted an hourly operational limit for the generator to allow the facility to stay below the Title V operating permit threshold. Therefore, a Title V operating permit is not required. Permit #2893-03 replaced Permit #2893-02 and **Addendum 3** replaced Addendum 2.

On December 30, 1999, Treasure was issued a modification to Permit #2893-03 to allow for wintertime operations (October 1, 1999, through March 31, 2000) at the following locations; the Creston Gravel Pit located within Section 34 (NE ¼, SW ¼, and NW ¼, SE ¼), Township 29 North, Range 20 West, in Flathead County and the Highway Maintenance Yard Gravel Pit located within Section 14 (NE ¼, NW ¼), Township 21 North, Range 29 West, in Sanders County. According to Department guidance, because the selected operating sites are within 10 km of the Kalispell PM₁₀ NAA and the Thompson Falls PM₁₀ NAA, respectively, the Department has conducted SCREEN3 VIEW modeling to establish allowable production limits in order to ensure compliance with national ambient air quality standards (NAAQS). Permit #2892-04 replaces Permit #2892-03 and Addendum 4 replaces Addendum 3.

On February 7, 2000, Treasure requested a permit modification to include the 1999 Barmac Impactor (maximum capacity 500 TPH) into the equipment previously covered under Permit #2893-04. The Barmac Impactor was inadvertently omitted from Permits #2893-03 and Permit #2893-04, though the equipment addition was initially requested January 7, 1999. During this permitting action, the Department updated the emissions inventory with the new emission factors. As a result of this action, the addition of the equipment was accomplished under the de minimis rule and the production limitation of Permit #2893-04 was removed. Permit #2893-05 replaced Permit #2893-04 and Addendum 5 replaced Addendum 4.

D. Current Permit Action

The current permitting action is in response to a request for an administrative amendment of Permit #2893-05 and Addendum 5. The current permit action will generalize the permit and renew the expired addendum. Further, the production limit that was removed in Permit #2893-04 was again established, as new emissions factors to accommodate the request to generalize the permit and keep the Treasure facility from exceeding any ambient air quality thresholds. Permit #2893-06 replaces Permit #2893-05 and **Addendum 6** replaces Addendum 5.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, are included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial quotations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available upon request from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including, but not limited to:

- 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
- 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment, (including

- instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
- 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Treasure shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.
- 5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
 - 1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Treasure must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Treasure shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 - 3. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.

- 4. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
- 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u> This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
- 6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR 60, NSPS, shall comply with the standards and provisions of 40 CFR Part 60.

In order for a crushing/screening plant to be subject to NSPS requirements, two specific criteria must be met. First, the crushing/screening plant must meet the definition of an affected facility and, second, the equipment in question must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Treasure, at the time of issuance of Permit #2893-06, the crushing/screening equipment to be used under Permit #2892-06 is subject to NSPS requirements because the date of manufacture of the crushers (40 CFR 60, Subpart A General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants) is after August 31, 1983.

- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that Treasure submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Treasure was not required to submit a permit application fee for the current permit action because it is an administrative amendment.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees.</u> An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in

- this chapter, unless indicated otherwise in a specific subchapter.
- 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit alteration to construct, modify, or use any asphalt plant, crusher or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Treasure has the PTE greater than 15 tons per year of particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), nitrogen oxides (NO_X), carbon monoxide (CO); therefore, an air quality permit is required.
- 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
- 4. <u>ARM 17.8.745 Montana Air Quality Permit--Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.
- 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application
 Requirements. This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Treasure was not required to submit a permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Treasure was not required to submit an affidavit of publication of public notice for the current permit action because it is an administrative amendment.
- 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Treasure of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

- 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of Treasure, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, subchapters 8, 9, and 10.
- 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since it is not a listed source and the facility's PTE is less than 250 tons per year (excluding fugitive emissions) of any air pollutant.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM_{10} in a serious PM_{10} nonattainment area.
 - 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2893-06 for Treasure, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for all criteria pollutants.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to a current NSPS (40 CFR Part 60, Subpart OOO) standards.
 - e. This facility is not subject to any current NESHAP standards.
 - f. This source is not a Title IV affected source nor a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that Treasure will be a minor source of emissions as defined under Title V and is not subject to Title V Operating Permit requirements. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Treasure will be required to obtain an Operating Permit.

- h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations, which limit that source's potential to emit.
 - i. In applying for an exemption under this section, the owner or operator of the source shall certify to the Department that the source's potential to emit does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on potential to emit

shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

The Department has determined that the annual reporting requirements contained in the permit are sufficient to satisfy this requirement.

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal required by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. Emission Inventory

		Tons/Year					
Source	PM	PM_{10}	NO_x	VOC	CO	SO_x	
1993 EL Jay cone crusher (up to 320 TPH)	2.14	1.02					
1999 Barmac Impact crusher (up to 500 TPH)	2.14	1.02					
screen (up to 320 TPH)	13.45	6.41					
screen (up to 320 TPH)	13.45	6.41					
Material Transfer	17.34	8.37					
Pile Forming	25.11	11.96					
Bulk Loading	10.76	5.12					
Diesel Generator (up to 1447 HP)	7.06	7.06	99.47	7.93	21.43	6.58	
Haul Roads	2.74	1.23					
Total	94.19	48.60	99.47	7.93	21.43	6.58	

• A complete emissions inventory for Permit #2893-06 is on file with the Department. This inventory is based upon a process rate of 195 TPH for the crushing/screening equipment and 4430 hours per year for the generator operations.

Addendum 6 Treasure State Construction, Inc. Permit #2893-06

An addendum to air quality Permit #2893-06 is hereby granted to Treasure State Construction, Inc. (Treasure) pursuant to Section 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.765, as amended, for the following:

I. Permitted Equipment: Treasure is permitted to operate a portable 1993 EL-Jay 1313 cone crusher (up to 320 TPH), a portable 1999 Barmac Impact crusher (up to 500 TPH), a portable 1974 Cedarapids feeder, two portable 1990 conveyors (36"x50"), two screens (up to 320 TPH each), one diesel generator (up to 1447 Horsepower (HP)), and associated equipment.

II. Seasonal and Site Restrictions

Addendum 6 applies to the Treasure facility while operating at any location in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1-March 31) The only location in or within 10 km of a PM_{10} nonattainment area where Treasure may operate is:
 - 1. The Creston Gravel Pit located within Section 34 (NE¹/₄, SW¹/₄, and NW¹/₄, SE¹/₄), Township 29 North, Range 20 West, in Flathead County, MT
 - 2. The Highway Maintenance Yard Gravel Pit located within Section 14 (NE ¼, NW ¼), Township 21 North, Range 29 West, in Sanders County.
 - 3. Any other site that may be approved, in writing, by the Department of Environmental Quality (Department).
- B. During the summer season (April 1-September 30) Treasure may operate at any location in or within 10 km of the Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish PM₁₀ nonattainment areas.
- C. Treasure shall comply with the limitations and conditions contained in Addendum 6 to Permit #2893-06 while operating in or within 10 km of any of the previously identified PM₁₀ nonattainment areas. Addendum 6 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum 6 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

III. Limitations and Conditions

A. Operational Requirements

- 1. Water spray bars must be available and operated, as necessary, on the crushers, screens, and all transfer points whenever the crushing/screening plant is in operation (ARM 17.8.749).
- 2. Treasure shall not cause or authorize to be discharged into the atmosphere from any equipment, such as screens or transfer points, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).

- 3. Treasure shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
- 4. Treasure shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
- 5. The crusher production for the two crushers shall not exceed 1,512 tons during any rolling 24-hour time period (ARM 17.8.749).
- 6. The total combined screen production for from the two screens shall not exceed 1,512 tons during any rolling 24-hour time period (ARM 17.8.749).
- 7. The hours of operation of the diesel generator shall not exceed 12 hours during any rolling 24-hour time period (ARM 17.8.749).

B. Operational Reporting Requirements

- 1. Treasure shall provide the Department with written notification of job completion within 10 working days of job completion (ARM 17.8.749).
- 2. Treasure shall provide the Department with written notice of relocation of the permitted equipment within 15 working days before the physical transfer of equipment (ARM 17.8.765).
- 3. Production information for the sites covered by this addendum must be submitted to the Department with the annual emissions inventory or within 30 days of completion of the project. The information must include (ARM 17.8.749):
 - a. Tons of material crushed by each crusher at each site,
 - b. Tons of material screened by each screen at each site,
 - c. Tons of bulk material loaded at each site,
 - d. Daily hours of operation at each site,
 - e. Gallons of diesel used by the generator at each site,
 - f. Fugitive dust information consisting of all plant vehicles, including the following:
 - i. Number of vehicles
 - ii. Vehicle type
 - iii. Vehicle weight, loaded
 - iv. Vehicle weight, unloaded
 - v. Number of tires on vehicle
 - vi. Average trip length
 - vii. Number of trips per day per vehicle
 - viii. Average vehicle speed
 - ix. Area of activity
 - x. Vehicle fuel usage (gasoline and diesel) annual total

- g. Fugitive dust control for haul roads and general plant area:
 - i. Hours of operation of water trucks
 - ii. Application schedule for chemical dust suppressant, if applicable
- 4. Treasure shall document, by day, the total crushing production. Treasure shall sum the total crushing production during the previous 24 hours to verify compliance with the limitation in Section III.A.5. A written report of compliance and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted and may be submitted along with the annual emissions inventory (ARM 17.8.752).
- 5. Treasure shall document, by day, the total screening production. Treasure shall sum the total screening production during the previous 24 hours to verify compliance with the limitation in Section III.A.6. A written report of compliance and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted and may be submitted along with the annual emissions inventory (ARM 17.8.752).
- 6. Treasure shall document, by day, the total hours of operation of the diesel generator. Treasure shall sum the total hours of operation of the diesel generator, during the previous 24 hours, to verify compliance with the limitation in Section III.A.7. A written report of compliance and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted and may be submitted along with the annual emissions inventory (ARM 17.8.752).

Addendum 6 Analysis Treasure State Construction, Inc. Permit #2893-06

I. Permitted Equipment

Treasure State Construction, Inc. (Treasure) operates a portable 1993 EL-Jay 1313 cone crusher (up to 320 tons per hour (TPH)), a portable 1999 Barmac Impact crusher (up to 500 TPH), a portable 1974 Cedarapids feeder, two portable 1990 conveyors (36"x50"), two screens (up to 320 TPH each), one diesel generator (up to 1447 Horsepower (HP)), and associated equipment.

II. Source Description

Treasure proposes to use this crushing/screening plant to crush, screen, and sort sand and gravel materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant via a hopper and transferred by conveyor to the crushers. From the crusher, materials are sent to the screen, where they are separated and conveyed to stockpiles.

III. Applicable Rules and Regulations

The following are partial quotations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

ARM 17.8, Subchapter 7 - Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

- A. <u>ARM 17.8.749 Conditions for Issuance of Permit.</u> This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- B. <u>ARM 17.8.764 Administrative Amendment to Permit</u>. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.
- C. <u>ARM 17.8.765 Transfer of Permit</u>. An air quality permit may be transferred from one location to another if:
 - 1. Written notice of Intent to Transfer location and proof of public notice are sent to the Department;
 - 2. The source will operate in the new location for a period of less than 1 year; and
 - 3. The source will not have any significant impact on any nonattainment area or any Class I area.

IV. Emission Inventory

		Lbs/Day						
Source	PM	PM_{10}	NO_x	VOC	CO	SO_x		
1993 EL Jay cone crusher (up to 320 TPH)	1.89	0.91						
1999 Barmac Impact crusher (up to 500 TPH)	1.89	0.91						
screen (up to 320 TPH)	11.91	5.67						
screen (up to 320 TPH)	11.91	5.67						
Material Transfer	15.35	7.41						
Pile Forming	22.23	10.58						
Bulk Loading	9.53	4.54						
Diesel Generator (up to 1447 HP)	38.68	38.68	545.05	43.43	117.45	36.04		
Haul Roads	15.00	6.75						
Total	128.39	81.12						

• A complete emissions inventory for Addendum 6 to Permit #2893-06 is on file with the Department. This inventory is based on a SCREEN3 VIEW modeled process rate of 31.5 TPH for the crushing/screening equipment and 12 hours per any rolling 24-hour time period for the generator operations.

V. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for particulate matter with an aerodynamic diameter of 10 microns or less (PM $_{10}$). Due to exceedances of the national standards for PM $_{10}$, the cities of Kalispell (and the nearby Evergreen area), Columbia Falls, Butte, Whitefish, Libby, Missoula, and Thompson Falls were designated by EPA as nonattainment for PM $_{10}$. As a result of this designation, the EPA required the Department and the City-County Health Departments to submit PM $_{10}$ State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies identified these sources to be the major contributors to PM $_{10}$ emissions.

Permit #2893-06 and Addendum 6 are for a portable crushing/screening plant that will locate at sites in or within 10 kilometers (km) of certain PM_{10} nonattainment areas. The more stringent operating conditions contained in the addendum will minimize any potential impact on the nonattainment areas and will protect the national ambient air quality standards. Also, this facility is a portable source that would operate on an intermittent and temporary basis and any effects on air quality will be minor and short-lived.

VI. Air Quality Impacts

Permit #2893-06 will cover the operations of this portable crushing/screening plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program, those areas that are tribal lands, or those areas in or within 10 kilometers (km) of certain PM₁₀ nonattainment areas. The initial site location has been identified as the Creston Gravel Pit located within Section 34 (NE½, SW¼, and NW¼, SE¼), Township 29 North, Range 20 West, in Flathead County, MT, and the Highway Maintenance Yard Gravel Pit located within Section 14 (NE ¼, NW ¼), Township 21 North, Range 29 West, in Sanders County, Montana. Addendum 6 to Permit #2893-06 will cover the operations of this portable crushing/screening plant, while operating in or within 10 km of the Thompson Falls and Kalispell PM₁₀ nonattainment areas (2 specific sites) during the winter months (October 1 through March 31). Additionally, the facility will also be allowed to operate in or within 10 km of certain PM₁₀ nonattainment areas during the summer months (April 1 through September 30). SCREEN3 VIEW modeling was used to establish

production limits for the Addendum. Thus, the limitations and conditions established in Addendum 6 would further reduce emissions in these areas and would be protective of the ambient air quality standards. In addition, this source is portable and any air quality impacts will be minimal.

VII. Taking or Damaging Analysis

As required by 2-10-101 through 105, Montana Code Annotated (MCA), the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VIII. Environmental Assessment

An environmental assessment was not required for the current permit action because the permit change is considered an administrative amendment.

Permit Analysis Prepared By: Ron Lowney

Date: June 1, 2004